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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/323,767	06/01/1999	DEREK MCAULEY	1018.008US1	9618

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EXAMINER

NGUYEN, HANH N

ART UNIT PAPER NUMBER

2662

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/323,767

Applicant(s)

MCAULEY ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 05/09/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-16,18-26 and 28-48 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-3,5-16,18-26 and 28-48 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7, 9-12, 15, 16, 18, 19, 20, 21, 24, 29, 33, 34, 36-41 and 43-48 are rejected under 35 USC 103(a) as being unpatentable over Chaudhuri (Pat.6,324,162 B1) in view of Newman (US Pat. No. 5,457,687).

Regarding claims 1, 12, 24, 29, 41, 44, 45, 46, 47 and 48, Chaudhuri disclose, in Fig.2, a network communication link 14, comprising working channels 16 and restoration channels 18 (a network link comprising a plurality of related channels) connecting a source (switching node 12A) to a destination (switching node 12D) (see col.3, lines 10-20). The source node 12A receives an indication that a working channel 16 is failed, (receiving a signal at a source indicating the link is failed), node 12A checks for availability of a restoration channel 18 on the link 14, and selects the restoration channel 18 A for automatic restoration. See col.6, lines 35-45 & Abstract. The working channels 16 and restoration channels 18 may transmit data at higher or lower rates (see col.3, lines 15-20). Chaudhuri does not disclose a signal indicative of an ECN event occurred by congestion within the channel.

Newman discloses a signal indication of an ECN (a congestion control signal indication of BECN) occurred by congestion with the channel is transmitted back to a source when a virtual channel in the ATM network is congested (signal indicative of ECN event caused by

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congestion). See Abstract. On receipt of the BECN signal, the source reduces its transmission rate for the indicated channel (decreasing packets transmitted on the congested channel).

Therefore, it would have been obvious to one ordinary skilled in the art to apply the Newman into the Chaudhuri in order to reducing the transmission rate on the selected restoration channel 18 and to transmit less packets on the restoration channel to prevent congestion in the network.

In claims 6, 9, 10 and 11, the limitations of these claims have been addressed in claim 1.

In claims 33, 36, 37 and 38, the limitations of these claims have been addressed in claim 29.

In claim 5 and 16, the limitation of this claim has been addressed in claim 1.

In claim 15, Chaudhuri discloses policy mechanism (restoration path computing system 20, Fig.2) residing at the network. See col.3, lines 47-65.

In claim 43, Chaudhuri does not disclose policy mechanism (processors in each switching nodes) comprising at least one queue and data a filter. Including queues in policy mechanism (processor) is well-known in the art. In addition, Newman discloses a filter 110 (fig.12) used to select congestion signal (see Abstract). Therefore, it would have been obvious to one ordinary skilled in the art to include queues and a filter in node processor of Chaudhuri to detect congested channel.

In claims 7, 34, 39 and 40, the limitations of these claims have been addressed in claims 1, 12, 29 and 41.

In claims 16 and 20, Chaudhuri does not disclose the policy mechanism resides at the source; and at the destination. However, as disclosed in the rejection of claim 1, the source node 12A receives an indication that a working channel 16 is failed, (receiving a signal at a source indicating the link is failed), node 12A checks for availability of a restoration channel 18 on the link 14, and selects the restoration channel 18 A for automatic restoration. See col.6, lines 35-45 & Abstract. Therefore, it would have been obvious to one ordinary skilled in the art to have a node processor in the node 12a of Chaudhuri in order to monitor link communication in the network.

In claims 18, 19 and 21, the limitations of these claims have been addressed in claim 12.

Claims 3, 13, 14, 25, 26 and 31 are rejected under 35 USC 103(a) as being unpatentable over Chaudhuri in view of Newman, and further in view of Hadi Salim et al. (US Pat. No. 6,625,118 B1).

In claims 3, 13, 14, 25, 26 and 31, Chaudhuri does not disclose the network comprises Internet. Hadi Salim et al. discloses, in Fig. 1, source TCP/IP 10 (source IP protocol layer) transmitting data packet across IP network (internet) to TCP/IP20 (destination IP protocol layer). See col.5, lines 25-35.

Claims 2, 22, 23, 28, 42 and 43 are rejected under 35 USC 103(a) as being unpatentable over Bales (EP 0836354 A2) in view of Newman (US Pat. No. 5,457,687), and further in view of Odlyzko (US Pat. No. 6,295,294 B1).

In claims 2, 22, 23, 28 and 42, Chaudhuri does not disclose a pricing criteria applied to channels. Odlyzko discloses a network is partitioned into logical channels and each user incurs a

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cost for use of each selected logical channel. The QOS of channels is different with respect to the cost of user. Lower cost channels carry more traffic (more congested) and Highest cost channels carry least traffic (least congested). See Fig.2B & Abstract. Therefore, it would have been obvious to one ordinary skill in the art to combine the teaching of Odlyzko with that of Chaudhuri by selecting a channel with low cost to transmit less packets to destination.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mishra (Paat.6456591 B1) discloses Fair Bandwith Sharing for Video Traffic Sources Using Distributed Feedback Control.

Takeuchi (Pat. 6,208,619 B1) discloses Packet data flow control method and device.

Jabbarnezhad (US Pat. No. 6,388,988 B1) discloses Method and System for Automatic Line Protection Switching of Embedded Channels.

Nishihara (Pat.6,424,620 B1) discloses Congestion Control System Capable of Detecting Congestion Occuring in an ATM Network and Autonomously Avoiding the Congestion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HANH NGUYEN
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'H. Nguyen', written in a cursive style.